AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1.-13. (Canceled)

14. (Currently Amended) A method for the identification of T-cell stimulating protein fragments comprising the following steps:

a) establishing the amino acid sequence of an antigen which is a protein or a peptide;

~~b)subdividing said antigen into protein fragments;~~

~~c)~~b) synthesizing at least one protein fragment having a length of from 8 to 30 amino acids, or cleaving said antigen ~~into~~to yield at least one protein fragment having a length of from 8 to 30 amino acids, wherein said protein fragment has an amino acid sequence which is a subsequence of the established amino acid sequence of said antigen;

~~d)~~c) incubating a suspension containing T cells with the protein fragment or fragments in different experimental runs for an incubation time, the incubation time being sufficiently long that the protein fragment or fragments are sufficiently taken up by the major histocompatibility antigen (MHC) molecules present on

the cellular surface, said protein fragment or fragments being sufficiently taken up by the MHC molecules when an unambiguous identification of stimulated T cells is possible, and the incubation time being sufficiently short that selection and proliferation of stimulated T-cells do not occur;

e) identifying

(i) at least one T cell cytokine which has been induced by the protein fragment or fragments and synthesized in the T cells, wherein the T cell cytokine or cytokines remain within the cell or are bound to the cell membrane; and/or

(ii) at least one activation marker is expressed or the expression of the marker is increased due to the T cell stimulation by the protein fragment or fragments wherein said activation marker can be present within the cell or expressed on the cellular surface;

wherein said T cell cytokine or cytokines or activation markers are identified by flow cytometry; and

f) assigning the experimental runs in which T cells have been stimulated and such stimulation has been recognized by the identification of one or more T cell cytokines and/or one or more activation markers, to the amino acid sequence or sequences of said protein fragments which had been incubated with the T cells.

15. (Previously Presented) The method for the identification of T-cell stimulating protein fragments according to claim 14, wherein said identification of at least one T cell cytokine or activation marker is made on the individual cell level.

16. (Previously Presented) The method for identification of T-cell stimulating protein fragments according to Claim 14, wherein the suspension of step d) comprises cells which present the protein fragment bound to MHC class I or class II molecules.

17. (Currently Amended) The method for the identification of T-cell stimulating protein fragments according to claim 16, wherein the protein fragment ~~in the class I restricted presentation~~bound to MHC class I molecules comprises from 9 to 11 amino acids, and the protein fragment ~~in the class II restricted presentation~~bound to MHC class II molecules comprises at least 11 amino acids.

18. (Previously Presented) The method for the identification of T-cell stimulating protein fragments according to claim 14, wherein said suspension containing T cells is a suspension of whole blood, peripheral white blood cells (PWBC), splenocytes, thymocytes, bone marrow, cerebrospinal fluid and/or lymph node cells.

19. (Previously Presented) The method for identification of T-cell stimulating protein fragments according to claim 14, wherein said suspension containing T cells is derived from patients to be subjected to therapy, from donors or from animals.

20. (Previously Presented) The method for the identification of T-cell stimulating protein fragments according to claim 14, wherein the protein or peptide

antigens are derived from multicellular eukaryotes, cells and/or tissues thereof, and cell cultures and/or tissues of donors or patients.

21. (Previously Presented) The method for the identification of T-cell stimulating protein fragments according to claim 14, wherein the T cell cytokines are of the types interferon-y, tumor necrosis factor-a (TNF-a) or interleukin 2.

22. (Withdrawn) A process for the preparation of a protein fragment/peptide which is T-cell stimulating and whose amino acid sequence or initial amino acid sequence was found by the method for the identification of T-cell stimulating protein fragments according to claim 14, wherein said protein fragment/peptide is prepared by the solid phase method, liquid phase method or by protein biosynthesis in a host.

23. (Withdrawn) The process for the preparation of a protein fragment/peptide according to claim 22, wherein said protein fragment/peptide contains insertions, deletions or substitutions (modifications) wherein one, two, three or more amino acids have been exchanged, deleted or inserted, wherein said modified protein fragment/peptide has essentially the same function with respect to the stimulation of T cells as the non-modified protein fragment/peptide.

24. (Withdrawn) The process for the preparation of a protein fragment/peptide according to claim 22, wherein said protein fragment/peptide contains at least one additional naturally occurring or not naturally occurring amino acid and/or protecting group at the N-terminal and/or C-terminal end (extended modification), wherein the extendedly modified protein fragment/peptide has essentially the same

function with respect to the stimulation of T cells as the non-modified protein fragment/peptide.

25. (Withdrawn) Method of using of a protein fragment/peptide prepared by the process according to claim 22 for the preparation of a medicament for immune stimulation.

26. (Withdrawn) Method of using a protein fragment/peptide according to claim 25, wherein said immune stimulation is a vaccination or desensitization.

27. (Canceled)